



**Hill 9-10 WATER ASSOCIATION
PUBLIC WATER SYSTEM #1700552
JUNE 1, 2015**

2014 Consumer Confidence Report

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2014.

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo ó hable con alguien que lo entienda bien.

Hill 9-10 Water Association Source Information:

Type of Water Source in Use: Groundwater

Name & Location of Source: Well 01 ~ Standby Only; Diamond Dust Trail Subdivision, Kelseyville
Well 02 ~ Diamond Dust Trail Subdivision, Kelseyville

Drinking Water Source Assessment Information

An assessment of the drinking water source for Hill 9-10 Water Association was conducted by Hill 9-10 Water Association in 2013. It was determined that both wells are most vulnerable to the presence of state highways/freeways, local transportation corridors and high density septic systems. A copy of the complete assessment is available at the California State Water Resources Control Board, Division of Drinking Water, 50 D St, Room 200, Santa Rosa, CA 95404. The phone number is (707) 576-2145.

General Drinking Water Source Information

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff,

and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4 AND 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1—SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

**Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.*

Microbiological Contaminants	Highest # of Detections	# of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria*	5*	1	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform Bacteria	0	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E. coli positive	0	Human and animal fecal waste

TABLE 2—SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper	No. of Samples Collected Date: 2014	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Copper (ppm)***	5	1.65**	1	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)**	5	16.3**	1	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

TABLE 3—SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2011	7.7	-	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2011	8.0	-	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Terms Used In This Report

<p><u>Maximum Contaminant Level (MCL):</u> The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.</p> <p><u>Maximum Contaminant Level Goal (MCLG):</u> The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).</p> <p><u>Public Health Goal (PHG):</u> The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.</p> <p><u>Maximum Residual Disinfectant Level (MRDL):</u> The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.</p> <p><u>Maximum Residual Disinfectant Level Goal (MRDLG):</u> The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.</p>	<p><u>Primary Drinking Water Standards (PDWS):</u> MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.</p> <p><u>Secondary Drinking Water Standards (SDWS):</u> MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.</p> <p><u>Treatment Technique (TT):</u> A required process intended to reduce the level of a contaminant in drinking water.</p> <p><u>Regulatory Action Level (AL):</u> The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.</p> <p><u>Variances and Exemptions:</u> Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.</p> <p><u>ND:</u> not detectable at testing limit.</p> <p><u>ppm:</u> parts per million or milligrams per liter (mg/L).</p> <p><u>ppb:</u> parts per billion or micrograms per liter (ug/L).</p> <p><u>pCi/L:</u> picocuries per liter (a measure of radiation).</p>
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TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Nitrate (ppm)	2014	2.3	2.1-2.5	45 (as NO ₃)	45 (as NO ₃)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Aluminum (ppm)	2014	0.063	-	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Chlorine (ppm)	2014	0.6	0.2 – 1.25	[MRDL=4.0 (as Cl ₂)]	[MRDLG=4 (as Cl ₂)]	Drinking water disinfectant added for treatment
Gross Alpha (pCi/L)	2014	1.52	1.2-1.84	15	(0)	Erosion of natural deposits

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

**Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report*

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Chloride (ppm)	2011	3	-	500	-	Runoff/leaching from natural deposits; seawater influence
Color (units)	2011	10	-	15	-	Naturally-occurring organic materials
Specific Conductance (µS/cm)	2014	100	-	1,600	-	Substances that form ions when in water; seawater influence
Aluminum (ppb)	2014	63	-	200	-	Erosion of natural deposits; residue from some surface water treatment processes
Sulfate (ppm)	2011	0.39	-	500	-	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids (ppm)	2011	120	-	1000	-	Runoff/leaching from natural deposits
Turbidity (units)	2011	4.5	-	5	-	Soil Runoff

Lead and Copper Information

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Hill 9-10 Water Association is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

SUMMARY INFORMATION FOR VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT

***Total Coliform Bacteria MCL Violation:** A microbial water quality MCL violation occurred in April, 2014 when Hill 9-10 Water Association experienced a broken water main, the identified cause of a total coliform positive routine sample. This sample was followed by 4 total coliform positive repeat samples in the same month. The routine sample and all 4 repeat samples were absent of fecal coliform bacteria. All subsequent routine samples have indicated no presence of total coliform bacteria.

****Lead AL Exceedance:** The water association collected 5 routine water samples in April, 2014 and had them analyzed for lead levels. One of these samples indicated lead levels that exceed the lead AL of 15 µg/L, also resulting in a 90th percentile level for lead that exceeds the AL. Additional monitoring for lead is scheduled for 2015.

Additional Lead Health Effects Language: *Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.*

*****Copper AL Exceedance:** The water association collected 5 routine water samples in April, 2014 and had them analyzed for copper levels. One of these samples indicated copper levels that exceed the copper AL of 1.3 mg/L, also resulting in a 90th percentile level for copper that exceeds the AL.

Additional Copper Health Effects Language: *Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.*

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